

Serial No. 10/016,938

Atty. Docket No. RD-26907

REMARKS

This application has been carefully reviewed in light of the Office Action dated June 18, 2003. By way of this amendment, new claim 14 has been added. Claims 1-7 and 14 are currently pending in the application. Applicant hereby requests further examination and reconsideration in view of the following remarks.

As an initial point applicant notes that the Examiner indicates in the Office Action dated June 18, 2003 that claims 1-6 are pending in the present application. However, applicant respectfully submits that claim 7 is also pending in the application as only claims 8-13 were cancelled in applicant's previous response.

The Examiner has rejected claims 1, 2 and 6 under 35 U.S.C. § 102(e) as being anticipated by Hertz et al. This ground of rejection is respectfully traversed.

Independent claim 1 recites a method of self-referencing a structure comprising the steps of applying an identifying marker to the exterior of the structure and creating a contour map representation of the structure such that the identifying marker forms part of the contour map representation.

Hertz et al discloses a visual bar code recognition system that uses a camera 14 to capture a color image of a bar code 24 and an item 26. The system includes a processor 12 that analyzes the image (including a color to gray scale conversion) to read the bar code 24. The processor 12 also compares features of the item 26 extracted from the image with product features stored in a product database 30 to verify or estimate the identity of the item 26, independently of the bar code reading. As indicated in lines 2-4 of column 3, only items whose features have been previously entered in the product database 30 are identifiable.

Applicant respectfully submits that Hertz et al fails to anticipate independent claim 1 because there is no showing of creating a contour map representation of the structure as required by claim 1. While Hertz et al does teach capturing a camera image of the item 26 with bar code 24, it is respectfully submitted that a camera image is not a contour map representation. A "contour map" is a well-recognized term of art referring to a map that shows elevations and surface configuration by means of contour lines. For example, the McGraw-Hill Dictionary of Scientific and Technical Terms, Fifth Edition, 1994, defines a contour map as "a map displaying topographic or structural contour lines," where contour line is defined as "a map line representing a contour, that is, connecting points of equal elevation above or below a datum plane." In view of this well accepted meaning of "contour map," it is clear that the camera image described in Hertz et al is not a contour map representation. Because Hertz et al does not disclose creating a contour map representation, the reference does not anticipate independent claim 1.

Claims 2 and 6 depend from independent claim 1 and are thus believed to be allowable for the reasons set forth above. Furthermore, these dependent claims set forth limitations not met by the prior art. For instance, even assuming for the sake of argument that the camera image of Hertz et al was a contour map representation, Hertz et al does not disclose indexing the captured images in a searchable database as required by claim 2. The images captured by the camera 14 of Hertz et al are compared to features already stored in the product database 30. However, there is no indication that the captured images themselves are in any way stored or indexed in the product database 30. In addition, there is no indication that the bar codes of Hertz et al comprise a serial pattern uniquely associated with each item, as required by claim 6. While the bar codes are used to identify the *type* of item scanned by the bar code recognition

system, there is no indication that the bar codes are serialized for *individual* items.

The Examiner has rejected claims 3 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Hertz et al in view of Sandstrom. This ground of rejection is respectfully traversed.

The Examiner acknowledges that Hertz et al fails to disclose an identifying marker that is a raised pattern (as recited in claim 3) or an identifying marker that is adhesively applied (as recited in claim 5). The Examiner relies on Sandstrom as teaching both of these features. However, even if one skilled in the art combined Hertz et al and Sandstrom in the manner suggested by the Examiner, this combination would still fail to overcome the above-described deficiencies of Hertz et al. Namely, there is still no teaching of creating a contour map representation as recited in independent claim 1. Thus, the combination of Hertz et al and Sandstrom would still fail to render independent claim 1 unpatentable. Because they both depend from claim 1, it is submitted that claims 3 and 5 are also allowable of the prior art.

Furthermore, applicant respectfully disagrees that it would have been obvious to provide the item of Hertz et al with a raised pattern identifying marker per the teaching of Sandstrom. While Sandstrom does mention raised identifying markers, this is in the context of the markers being tactile, i.e., perceptible by touch. Because Hertz et al involves a *visual* bar code recognition system, there would be no motivation to utilize a tactile marker. The Examiner contends that one of ordinary skill in the art would have been motivated to use a raised marker in order to be identifiable by the human eye, thereby making identification easier because a bar code scanner would not be required. However, eliminating the use the bar code scanner would completely undermine the intended purpose of the Hertz et al invention, which is to combine conventional decoding techniques with optical character recognition.

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The Examiner has rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Hertz et al in view of Sandstrom and further in view of Samonides. This ground of rejection is respectfully traversed.

The Examiner recognizes that the combination of Hertz et al and Sandstrom does not disclose the claim 4 requirement of machining a raised pattern into a surface of the structure. Samonides teaches etching identifying indicia into the surface of a part but does not teach creating a contour map representation as recited in independent claim 1. Thus, the combination of Hertz et al and Sandstrom, even when modified by Samonides, still fails to render independent claim 1 unpatentable. Claim 4 depends from claim 1 and is thus also allowable of the prior art.

With respect to claim 7, which was not addressed in the Office Action, applicant respectfully submits that the prior art of record fails to teach or suggest the step of tracking a fabrication or service life of a structure using its identifying marker.

Claim 14 has been submitted to further distinguish the present invention over the prior art of record. There is no showing in the prior art of using a light gauge system having an illumination source and two cameras to create a contour map representation of a structure including an identifying marker.

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In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the objections and rejections is requested. Allowance of claims 1-7 and 14 at an early date is solicited.

Respectfully submitted,

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Date

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